

Appl. No. : 09/771,043
Filed : January 26, 2001

AMENDMENTS TO THE CLAIMS

1.-3. (Cancelled)

4. (Currently amended) A nucleic acid-immobilized substrate comprising a substrate and a nucleic acid immobilized on the substrate, wherein

(1) the substrate consists of a plastic selected from the group consisting of polyethylene, polystyrene, polycarbonate, polypropylene, phenol resin, epoxy resin, polycarbodiimide resin, polyvinyl chloride, polyvinylidene fluoride, polyethylene fluoride, polyimide, and acrylate resin, or the substrate carries a carrier thereon, said carrier consisting of the plastic;

(2) the nucleic acid has a polymer comprising a compound having an unsaturated bond, said polymer being bonded to the 3' end or 5' end or both ends of the nucleic acid, said polymer being a polymer of a monomer having a base selected from the group consisting of thymine, a thymine derivative, uracil and a uracil derivative, with an average degree of polymerization of the polymer being not less than 3 and not more than 100; and

(3) the nucleic acid-immobilized substrate is obtained by bringing the substrate into contact with the nucleic acid, and irradiating a contact portion with an electromagnetic wave, whereby the polymer reacts with the plastic.

5.-6. (Cancelled)

7. (Currently amended) A method for producing a nucleic acid-immobilized substrate, comprising bringing a substrate into contact with a nucleic acid, and irradiating a contact portion with an electromagnetic wave, wherein

(1) the substrate consists of a plastic selected from the group consisting of polyethylene, polystyrene, polycarbonate, polypropylene, phenol resin, epoxy resin, polycarbodiimide resin, polyvinyl chloride, polyvinylidene fluoride, polyethylene fluoride, polyimide, and acrylate resin, or the substrate carries a carrier thereon, said carrier consisting of the plastic; and

(2) the nucleic acid has a polymer comprising a compound having an unsaturated bond, said polymer being bonded to the 3' end or 5' end or both ends of the nucleic acid,

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said polymer being a polymer of a monomer having a base selected from the group consisting of thymine, a thymine derivative, uracil and a uracil derivative, with an average degree of polymerization of the polymer being not less than 3 and not more than 100, and whereby the polymer reacts with the plastic.

8.-9. (Cancelled)

10. (Previously presented) A method for detecting a nucleic acid by hybridization using an immobilized nucleic acid, which comprises hybridizing the nucleic acid to be detected to the nucleic acid-immobilized substrate as defined in claim 4.

11.-12. (Cancelled)

Claim 13. (Previously presented) The method according to claim 10, further comprising:

washing the nucleic acid-immobilized substrate; and
detecting the hybridized nucleic acid.